

ABSTRACT OF THE INVENTION

[0073] A method of forming a germanium-on-insulator (GOI). An epitaxial germanium layer is formed on top of a first substrate. A first dielectric film is formed on top of the epitaxial germanium layer. A second substrate is provided. The first substrate is bonded to the second substrate by bonding the first dielectric film to the second substrate. The bonding resulted in a bonded wafer pair. The first substrate is removed after the bonding to expose epitaxial germanium layer to form the GOI substrate.